

# The Chronicle

of the

## EARLY AMERICAN INDUSTRIES ASSOCIATION

*Published from time to time for the Information of its Members*

Volume 1

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### *Manufacture of Tacks, Brads and Sprigs*

By EARLE T. GOODNOW

(The following information was secured from a letter of May 30th, 1832, written at Abington, Mass., by Benj. Hobart to the Secretary of State of the United States.)

The making of tacks by hand commenced in the town of Abington about 1770. The first attempt was to cut up old hoops into points, by a very imperfect kind of shears, and take them up, one by one, and place them in a common vise and screw up and unscrew for the purpose of heading each tack with a hammer. From this process they were called *cut tacks*.

This mode was much improved by the use of movable dies about the year 1800. These dies were placed in an iron frame in the shape of an ox-bow; the two ends in which were placed the dies, being brought together by a lever pressed by the foot. In the first process a man might make 1,000 tacks per day, in the latter 8,000 per day. This was a great improvement and the inventor, Mr. Ezekiel Reed, was entitled to a patent, but he could not conceal the simple operation and it soon came into common use.

(While this machine might in one sense be considered as heralding the passing of the hand mode, do not overlook the fact that to make one tack a kick of the foot was necessary and, after all, by this process the operator was only able to produce 8,000 tacks per day and incidentally a day was fifteen hours in the summer and ten hours in the winter.)

With these machines or *tack tools* as they were called, thus improved, from three to four hundred men and boys were employed in making tacks in the town of Abington and vicinity from about 1800 to 1816. For about thirty years previous to 1800, the business progressed from a small beginning to the employment of the

*Continued on page 6, column 1*

### *Collecting Hand-forged Nails*

By REV. CLAIR F. LUTHER

(EDITOR'S NOTE — In the *New York Sun* of January 13th, appeared a most interesting and informative article on nail-making by Mr. Luther. We take the liberty of quoting the first few lines, which we believe will make everyone keen to read the whole article: "Behind the hand-forged nail with the charm and interest for the antiquarian — for even a bit of rusty iron may possess an aureate charm — lies a tragic story of hardship and suffering all out of proportion to the tiny product which now goes to grace the walls of a museum or forms a pattern in an old batten door.")

The article on Hand-Forged Nails in a recent issue of the *New York*

### *Our Purpose*

The purpose of the association is to encourage the study and better understanding of early American industry, in the home, in the shop, on the farm, and on the sea, and especially to discover, identify, classify, preserve and exhibit obsolete tools, implements, utensils, instruments, vehicles, appliances and mechanical devices used by American craftsmen, farmers, housewives, mariners, professional men and other workers.

### *Dues*

The annual dues are one dollar, payable September first, for the year immediately ensuing.

The *Chronicle* is sent to all members without additional charge. Back numbers may be secured, when available, by application to the Treasurer, enclosing postage.

*Sun* has suggested to the Editor that I say a word about my collection, to which reference was made.

Let me say first of all that it is the most inexpensive form of collecting known to the fraternity. And that consideration, while reducing expense to the vanishing point, in no wise detracts from the value of the collection. For the value of any collection

*Continued on page 6, column 2*

### *Tubular Burners for Glass Lamps*

By EDWARD A. RUSHFORD

The development of an interest in the so-called whale oil burner led to considerable research in relation to all lamp burners which preceded the distinctly kerosene type. While far from completed, this study has brought out some facts which we hope will be of interest. For this series of short articles only the burners made with one or more small tubes, and intended for use with glass lamps will be considered. For convenience these small tubular burners may be divided into three classes: (a) the drop burner, (b) the whale oil burner, and (c) the camphene burner.

The drop burner is the most simple of all these types, and is generally composed of but two parts, a plate and a tube. They were simply dropped into the opening in the reservoir of the lamp. The stability of their position depended on their own weight, and the weight of the wick they carried, and to a certain extent upon the adhesive qualities of the oil or grease which served the lamp as fuel.

The term "whale oil" has become firmly attached to that type of burner, which unquestionably came into existence as a result of the extensive use of whale oil as a burning fluid. They were also employed in the burning of other fluids, though to a very small extent. When used with camphene, the results were disastrous. Their early use with lard and lard oil was not satisfactory, though they were being made and recommended for use with lard oil as late as 1896.

Soon after camphene came into use as an illuminant the need of a safer type of burner became urgent, and one with thin, tapering tubes was invented. Apparently the advent of the new burner took place at about the same time that an improved camphene, known as burning fluid, made

*Continued on page 6, column 3*

# The Chronicle

## Early American Manufacture of Felt Hats

By WILLIAM B. SPRAGUE

(Continued from last issue)

(N. B. — Letters and numerals refer to list of authorities at end of article.)

The bower, being supplied with the loose fur, first "shovelled the material toward his right hand with the basket" (A166, B111). He then weighed out a sufficient quantity for the *batt* — which term will be later explained — a heap which he could cover with his hand (P60), about two and one-half ounces (D240). One modern writer says that "the fur was mixed by a triangle of many strings, which was passed through the fur and then shaken in many directions" (N60) but the writer has not found this tool, or heard of it elsewhere. The workman held the bow in his left hand,



"Bowling"  
from Tomlinson's Cyclopaedia (C)

the bow-pin in his right (A166, B111, C4, D240) although the bow was sometimes "held by a strap fixed near the suspension point" (E270) and sometimes, according to one authority, the string was plucked with the thumb (K1071). The string of the bow was lightly placed upon the pile of fur (A166) and caused to vibrate by "repeated and sudden twangs" (C4), the strokes being toward the worker (J994). The result of this operation has been variously described as follows. "The string, in its return, strikes upon the fur, and causes it to spring up in the air, and fly partly across the hurdle in a light open form, \* \* \* and this beating is repeated till all the original clots, or filaments, are perfectly opened and dilated, and having thus fallen to-

gether in all possible directions, form a thin mass or substance for the felt" (A166, B111, J994). "Plucking the string makes it vibrate smartly against the fibrous substances, so as to disentangle them, toss them up in the air and curiously arrange themselves in a pretty uniform layer or fleece" (D240). The fur is "violently agitated, tossed in the air, and caused to mix thoroughly, the fibres falling with the greatest possible irregularity upon a table (N. B. obviously the hurdle), and this becoming spread out evenly in a thin sheet, the fibres of which are interlaced in every possible direction" (L779). "At every vibration on the tangled heap of fur, a quantity of the filaments spring up several inches, are carried a little to the right of the bow, and fall down within certain limits, in which they are detained by the basket." (C4). "Such is the dexterity attained by the workman that he seems able by the vibrations of his string to make the filaments fall into any required shape or position" (C4). In a few minutes (C4) the fur was thus spread into an oval sheet about four feet long and three feet wide (C4, N60). This was known as a *batt*, and never exceeded one-half the amount of material required for the hat (A166, B111) and sometimes as little as one-third (E271) — the purpose of which will be later apparent. Care was taken to work about two-thirds of the fur down toward what was intended for the brim, so that greater density could be effected at that point by the subsequent opera-



"Hat Battery or Kettle"  
from Knights Cyclopaedia (Z)

tions (P60). If fur and wool were to be mixed, they were first bowed separately and then placed one over

the other and bowed again (K1071). A yellowed old tag, attached to a hatter's basket found in Danbury, states that after the bowing "the fur lay from six to twelve inches high on the hurl," but this seems irreconcilable with the insistence of the writers quoted above that the layer of fur was "thin." A modern writer states that bowing was the process also used for separating seed from cotton prior to the invention of the cotton gin (S).

"The operation was one which required skill, judgment and experience in the operator and a competent bower was always in demand" (L779), but when the felting machine appeared in Danbury, about 1850, these experts found that their services were no longer appreciated or required, and they gradually drifted into retirement, making no secret of their conviction that the new invention was imprac-



"Hat Maker's Battery"  
from Tomlinson's Cyclopaedia (C)

tical and would never be permanently satisfactory, and for about thirty years bowing was supposed to be a forgotten art. However, in the early 1880s, the women of the country suddenly decided that no headgear would suit them except a certain kind of "napped" hat, which no machine known at that time could produce. In this extremity, the manufacturers conducted a country-wide canvass for men who could "bow a batt," offering bonuses and irresistible wages, and in response, quite a number of the old-timers marched into the factories, with their old bows over their shoulders, exulting in the realization of their prophesy, and for the span of a year or two, until they were again supplanted by an improved machine, lived in the most ostenta-

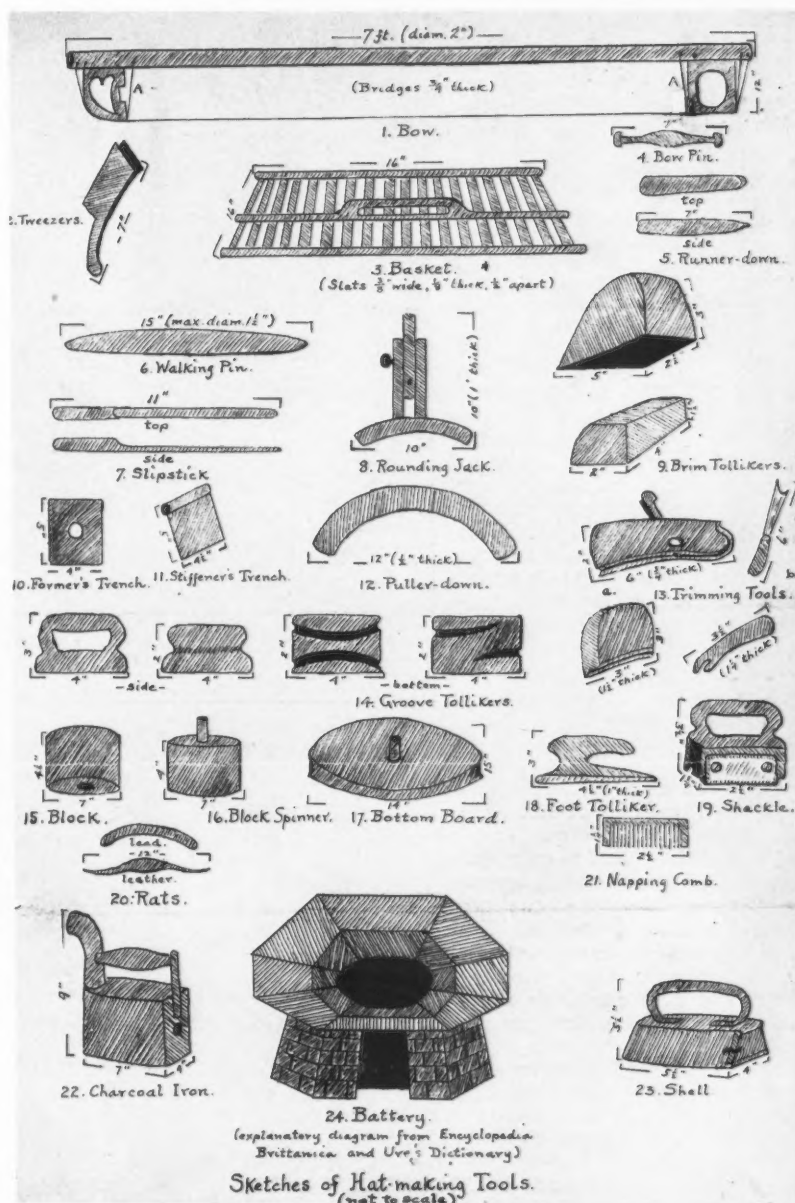
## Early American Industries Association

tious affluence, refusing to teach their trade to others, and were generally the "cocks-of-the-walk" (M22, V, X).

**Hardening**, the next step in the manufacture, was accomplished by pressing down the bowed fur "with the convex side of the basket" (A167, B112) and then covering it with a linen cloth, kept constantly damp, and pressing and rubbing it with the hands (A167, B112, C4, H53, S). "The lamellae of each hair by fixing themselves to other hairs which happened to be directed the contrary way keep the whole compact" (A167) and "cause the particles to become entangled and hooked together" (B112). A *hardening skin* of leather, alumed or half-tanned, used instead of the linen cloth, was said to have produced quicker results (A167, G640, P60) the skin being "rubbed firmly with both hands, with a somewhat jerky motion, and being taken up and put down again in a different position several times" (C4) and oil-cloth was sometimes employed for the same purpose (D240, G supp. 142, K1071). The object hanging on the wall at the right, in the bowing picture from Tomlinson's *Cyclopaedia*, probably represents the hardening skin. The cloth or leather was then taken off and a piece of brown paper, folded into a triangle, was laid on the batt, and the edges of the batt folded over the paper so that they overlapped, these edges being joined and amalgamated by another application of the damp cloth and the same pressure and rubbing (A167, B112, H53), and by rolling and unrolling the batt while wrapped in the cloth (D240) sometimes called *crozing* (K652). "We now have a conical cap, the paper having kept the sides from sticking together" (A167, B112). Another batt was then bowed and hardened, the first batt laid upon it with the joint down, the end of the second batt folded over the first and joined by the same process, so that for strength, the joined edges were on opposite sides (A168, B113, G640, P60, N60).

*Basoning* seems to have been a process applied only to wool hats. The *bason* was a circular piece of cast metal about three feet across (A168, B113). It was heated and laid over a hole in a plank under which was a grating, and the cap laid upon it and worked for about half an hour (E271, J294). One could wish for a more lucid explanation of this process, but thus far it is not available.

The next operation was *working*, also termed *planking* (E271, K1071)



Numerals correspond to those in the photographs published with the first installment of this article.

and *fulling* (D240). Before this, the cap was boiled for six or eight hours, the boiler being lined with straw, to prevent the cap from touching it (E271). The *battery*, at which the cap was worked, consisted of a kettle and eight planks of wood joined together "in the form of a cone from which the top has been sliced off," and meeting in the kettle at the middle (A168, B114) resembling a very flat mill-hopper (G641). (See sketch 24). The upper edge of each plank

was about two feet across and stood about two and one-half feet from the ground, the whole battery being about six feet in diameter (A168, B114, E272). The planks and kettle were supported by brickwork with a fire place underneath (E272). The upper part of each shelf, or plank, was mahogany, and the lower part was lead (G641, P60) and each shelf was designed to accommodate one workman (G641).

(To be continued in next issue)



# The Chronicle

## A Southern Wheelwright Shop of the Early 19th Century

By STEPHEN C. WOLCOTT

(Continued from last issue)

One of his benches, known as a *wheelwright's bench*<sup>18</sup>, will be exactly like his carpenter's bench, except that the vise will extend about six inches above the bench top. His second wheelwright bench will be unique. So far as I can find out, this type of bench was used locally only. (Please advise me if this is not the case, or if you know of another name for this bench.) This bench, some two feet wide by six feet long, had a vise the same as the wheelwright's bench. Its difference lies in its having a V-shaped piece cut out of its top, starting some six inches to the right of the vise and extending to within a foot of the other end. This enabled the worker to stand inside the bench and in line with his work. This is known locally as a *V-bench*<sup>19</sup>.

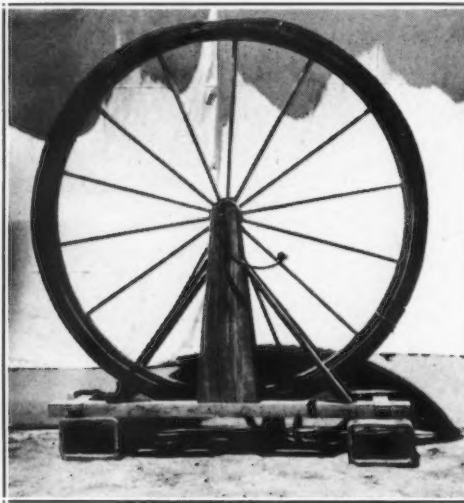
Next to this bench, the most needed tool was a *lathe*<sup>20</sup>, with its *Great Wheel*<sup>21</sup>—as Dr. Mercer in his *Ancient Tools* calls it. A description of these is hardly necessary. The lathe bed in the illustration is only six feet long. This, I understand, because it had been cut down due to one end rotting or becoming worm eaten. Usually these beds were ten to twelve feet long, for on them were turned many legs of our high and low post beds, and later the various spindles and legs on the spool beds.

The turning tools<sup>22</sup> were very simple, usually home-made, and consisted of one or two gouges and one or two chisels; later as finer or more varied work was required, a few more of different sizes might be added.

At some shops the lathe and its wheel were placed inside the shop, but as a rule and in this case they were in a lean-to at the side.

These Great Wheels being so unique and confined mostly to the South, a word as to their use may be interesting.

The first criticism of them would be the need of another hand, and that is the reason they could be used in the South as against the one-man treadle lathe of the North, as there was always that extra negro boy handy, glad to make a penny or two. These wheels, sometimes operated by one man, sometimes with a handle on each side for two men, could spin a lathe with great



The "Great Wheel"  
Turned by one man, though sometimes two,  
for spinning the lathe.

Wheel Block  
The rod showing in the center is fastened in  
the floor.

speed, giving enough momentum to enable the turner to work the hardest and largest pieces of wood. Especially was this necessary in turning the large wheel hubs used in old time carrier logs.

Next in importance of daily use was the humble *chopping block* and *felloe horse*. This was usually saved from a large tree that had been cut for the weatherboards; carefully selected from that part of the tree where a branch some six inches in diameter had grown from the side; it was considered a great prize if he could find a piece with such branches coming off nearly opposite each other. These branches were cut off some three or four inches from the block and a hollow made into the block just above the stump. With such a block some twenty inches or more in diameter and two feet high, our wheelwright had not only his chopping block but his *felloe horse*<sup>23</sup>, for in these holes could rest the felloe while its inside curve was worked out with an *adz*<sup>24</sup>.

Under one of the benches stand two logs on short legs, with most of the top center cut out. Like many of the practical and efficient tools of our early

artisans, these two belie their looks, for not only is ease of operation permitted, but comfort to the operator combined in these *hub mortising blocks*<sup>25</sup> or horses. After a hub is turned down, it is marked for the positions of the spokes, and it is then

wedged in one of these horses. With the operator seated at one end, he is at the right height and place to work to the best advantage. This work required a keen eye and a steady hand, so most of it was done by the best workman. After the hub was set, the proper dish of the spokes was determined; with that angle in mind and gauge adjusted, holes were bored with a *nose auger*<sup>26</sup> straight through toward the center until the center hole was struck. This center hole was about an inch in diameter from end to end of the hub, for the purpose of seasoning. After all spoke locations were bored, *mortising chisels*<sup>27</sup> were brought into action until it was practically finished. There remained smoothing up of the sides with a *firmer chisel*<sup>28</sup> and cleaning out the corners with the *buzz*<sup>29</sup> or *corner chisel*<sup>30</sup>. After the first hole is finished, the hub is turned over that the opposite mortise may be cut, the first cut allowing the borings and shaving to drop through. This operation was continued until all the required mortises were finished.

The mortising horse having been returned to the seclusion of the bench, the hub was clamped as tightly as possible on the iron spindle sticking straight up from the center of the *wheel block*<sup>31</sup>. This was true in our shop, although for the sake of honesty and clearness it is only right to say that some wheelwrights used a *wheel pit*. This was a pit about six inches wide by four to six feet long, and four feet deep. When this was used, the hub was securely clamped at its center.

The spokes were begun some two years ago, when they were riven out with the *spoke frow*, or in our early shop the *shingle frow*, having it on hand. Now, properly seasoned, they are roughly chopped into shape with a *hatchet* on our *chopping block*, then with a *draw knife*, while being held in the vise, they are further shaped into being. With a *tenon* or *hand saw*, or lacking these the *frame saw* will do, the shoulder of the tenon at the foot is formed.

(To be continued in next issue)

The small numerals refer to illustrations to be published with last instalment.

# Early American Industries Association

## Early American Industries Association

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Communications should be addressed as follows: Pertaining to this magazine, S. C. Wolcott. Candidates proposed for membership, to S. E. Gage. Suggestions for prospective members, to A. E. Lownes, addresses as above.

*This issue was printed by Leon S. Case  
Flushing, N. Y.*

S. C. WOLCOTT, Editor  
W. B. SPRAGUE, Assistant Editor

## Editorial

In the past the mediums of expression of thoughts have been of little importance. It was the results that had value. Now that we are beginning to acknowledge the personality of the worker and value his work because of it, why not take time to consider the mediums by which it was produced? True, there is seldom any artistic beauty or practical value in his old tools. This, as a machine age, has relegated hand tools to the junkman and the dump heap. That very fact has made them scarce and prized because they are difficult to find. Outside of any sentimental value for the work done, they are acquiring an antiquarian status and are taking their proper place in the estimation of many of those who realize that to the industrial life of our early artisans, their creations, their inventions and the continued improvement in these same tools, or as we have said, these mediums of expression, is due the great progress we as a nation have made in less than a hundred years. One of the many thoughts brought up

## The Progress of the "Experiment"

Your officers are much gratified at the response of the members to the appeal for financial help contained in our last issue and in the accompanying circular. Messrs. Blumenthal, Brinton, Cutler, Gehri, Jenkins, Lownes, Pell, Sprague, Wiggins, Wolcott and Mrs. Bryant have made special contributions and some of our members have evidently been busily recruiting. However, we are not yet, by any means, over the top. We have exhausted the liberal appropriation which Mr. Wells so kindly provided to get us started, and, in round figures, our present financial situation is as follows. After paying all printing and mailing expenses to date, including this issue, we have in hand about \$100. Each number like this will cost approximately \$80, exclusive of cuts, which have heretofore been donated. We have 140 members. If each of these will bring in two or three of his or her friends (bearing in mind that we are so scattered geographically that our respective circles of acquaintance scarcely overlap at all) we shall have sufficient funds from dues to publish five more numbers before September first, at which time we should receive one dollar from each of our then members with which to commence a new fiscal year. We believe that this can be done if every member will make a conscientious canvass of his or her friends, of whom a fair proportion are sure to be interested. And, in the meantime, if you can spare \$5 or \$10 or more, to keep the ball rolling, send it to the treasurer, Mr. E. T. Goodnow, West Cummington, Mass.

at our organization meeting was to help each other to acquire those tools in which each is particularly interested, by passing on any information as to the location of any that are for sale. The temptation is to keep to ourselves any favorite source of supply, but let us sometimes suppress our acquisitive instincts, to the end that whoever may have the actual possession, these worthy relics may be preserved for the benefit of coming generations.

## Welcome, Rushlighters!

We are very glad to announce that many of the members of the Rushlight Club have recently joined our association. This club is composed of collectors who specialize in lighting devices, with a present membership of about sixty, and growing rapidly. There is not the slightest idea in anyone's mind of merging or affiliating the two organizations, nor would any good purpose apparently be served thereby, but we propose to reserve for

the Rushlighters, in each issue, ample space for discussion of their particular subject, which is, of course, a most important branch of early industry. Anyone who wishes to join the Rushlight Club should communicate with the secretary, Mrs. Edward Ingraham, 7 Lowell Street, Cambridge, Mass. Dues are \$1.50 a year. The last meeting of the club was held on March 10th, at 2 p.m., in the Department of Classical Antiquities of the Boston Art Museum.

## Our Grateful Acknowledgments

The Editor has received many letters from members commending our February issue, which are very greatly appreciated. He trusts that they will accept his thanks in this form, rather than by individual acknowledgment. Much of the credit should go to Mr. Harry C. Ray, in charge of Mr. Well's printing plant, for his patient and wise counsel with respect to the arrangement of the contents, and to the other officers of the association for their advice and contributions of material. Particularly gratifying is the fact that the New York Public Library has entered its subscription, with the statement from Mr. William B. Gamble, Chief of the Science-Technology Division, that they are "very glad to have it on their shelves." Mr. Russell M. Anderson, Curator of Agriculture, Textiles and Forestry for the Chicago Museum of Science and Industry, says "This is a most excellent publication . . . To those who can assist all honor is due." We are indebted to Mr. Walter Rendell Storey for an attractive notice in the magazine supplement of the *New York Times* of February 4th. The magazine *Antiques* for February gave us a good send-off. And Mr. Charles Messer Stow, in his always interesting antiques section of the *Saturday New York Sun*, on February 17th, provided us with the best piece of publicity which we have yet received—a two-column article with a most complete and interesting review of our last issue, resulting in many inquiries from desirable prospective members.

## Errata

A few typographical errors crept into our last issue. They should be corrected as follows: Page 2, column 2, line 23, "unbarbed" for "unbarked"; page 3, column 1, line 19, "frow club" for "from chib" page 3, column 1, line 49, numeral "5" after "axe," and omit "broadaxe"; page 3, column 1, line 57, "tue" for "tire."

# The Chronicle

## Tack Manufacture

Continued from page 1, column 1

number of hands above mentioned.

In 1815-16 a machine was invented by Mr. Jesse Reed, of Hanover, son of the aforementioned Ezekiel Reed, to make tacks in one operation. Mr. Melvil Otis, of Bridgewater, claimed and received a considerable share in the invention. Improvements on the machines were soon made by Thomas Blanchard, of Springfield, and Samuel Rogers, of East Bridgewater. For the exclusive patent rights on these improved machines, Elihu Hobart and the writer of the letter, Benjamin Hobart, paid \$20,000; they also expended about \$10,000. for building machines and fixtures and putting them into operation by water power; these new machines produced from 100,000 to 150,000 tacks each per day, and one, for some reason better than the rest, produced 250,000 in one day.

In conclusion, a few figures on the quantity and cost of production may be of interest. They are as follows — for one year's production — to manufacture 300 tons required about \$35,000. to be invested in land, water privileges, buildings, fixtures and machinery, with tools, wagons and horses, or oxen, for transportation purposes, and exclusive of patent rights,— say for these .....\$ 35,000.  
300 tons of iron ..... 30,000.  
Rolling same into plates .... 9,000.  
Transportation 25 miles .... 2,000.  
To 100 workmen for making  
1,200,000 m. of tacks, or  
1,200,000,000 in month .... 15,000.  
Papering and boxing ..... 1,000.  
5,500 wooden boxes ..... 1,000.  
200 reams of house sheathing paper ..... 700.  
Wharfage on 5,000 boxes shipped ..... 100.  
Freight ..... 750.  
Iron, steel, files, band leather, oil and twine ..... 750.  
Agents to superintend ..... 1,500.  
Commissions on sales..... 1,500.  
Insurance ..... 500.  
Coal, wood, etc., etc. .... 1,500.

TOTAL .....\$100,300.

These figures were for two shops. There were in the United States about this time a number of shops which used about 2,000 tons of iron and paid out a total of about \$200,000. in labor.

In the manufacture of the following articles, tacks were extensively used: hand-cards, trunks, saddles,

carriages, bellows, cigar and other boxes, brooms, brushes, sieves, shoes, posting advertisements, etc., etc.

## Collecting Nails

Continued from page 1, column 2

is not altogether in intrinsic worth, but in what the collection stands for and represents.

A hand-forged nail links up with personality. It is no product of an unthinking, unfeeling machine. A living person, man, woman or child even, once handled it, shaped it, used it. It comes down invested with human effort. And then it went into the building of a home, wherein the fundamental factors of life, love and labor, pain and pleasure, birth, marriage and death were to be entertained.

I almost hesitate to confess it, but there is to me a suggestion of sanctity in every hand-wrought nail. Somehow it seems to gather up and express the very soul of those hardy pioneers, their hopes and fears, their hardships and their heroism.

The collecting of these products of the 17th and 18th centuries is necessarily limited to the fringe of settlement along the Atlantic coast, but that presents a fairly long range. The maritime provinces offer a particularly fertile field, since few buildings projects have necessitated the demolition of old houses, and the urge to the cities and the States has left the country-side undisturbed.

My own location here in Amherst is exceptionally favorable for the pursuit, since practically five entire towns to the east are to be submerged under the new Metropolitan Supply project and dozens of houses of the pre-Revolutionary days are being razed. I know of one thrifty yokel who has accumulated more than a hundred pounds of the hand-forged product. I might run him a close second.

I have gathered nails, brads and sprigs from some thirty different houses or ruins, besides from chests, low-boys and other pieces of furniture. I make it a point of honor never to pass a ruin without investigation. Even if the structure has undergone various stages of repair, some original part is pretty sure to harbor the thing sought. There is infinite variety, yet all bear much the same stamp. Not long ago I happened upon a handful probably made of Swedish iron, as

blue and bright as on the day they were driven home in the solid oak.

My collection ranging from Montauk Point to Fredericton, N. B., has cost me not a cent, and has contributed pleasures and satisfactions not to be purchased with many dollars.

## Lamp Burners

Continued from page 1, column 3

its appearance on the market. So while we of today are inclined to term this type of burner as camphene, members of the older generations will invariably call it a fluid burner.

It is my opinion that the drop burner is distinctly a Central European product. I have found none on lamps which are unquestionably American, while I have found many on lamps of authentic European origin. Naturally, as they were easy to make, some may have been produced in this country by local tinnerns, to fit lamps brought here by natives of countries lying on the other side of the Atlantic.

Many glass collectors, possessing specimens of lamps with drop burners, claim them to be early American, and I have no positive evidence as yet to dispute their claim. I have asked a number of them for proof of their American origin, stating my belief that all such lamps are foreign. The reply generally is, that foreign workmen, beginning to work at their trade in this country, naturally fashioned their products in the form to which they were accustomed. I admit the logic of this theory, but am still unconvinced, especially in view of the facts that these burners were made in Europe up to a very late date, and that many lamps so equipped have found their way to the United States since the World War, in the importations of antique collectors and dealers. I firmly believe that if we collectors of the antique, no matter in which branch we specialize, would accustom ourselves to the use of some form of the words "possible" or "probable", when we speak of Early American, we would stand on much firmer ground than we do at present.

The typical drop burner is always made of tin, and consists of a circular plate, pierced at or near the center by a tube. I have never encountered two of these burners made in the same fashion, nor have I found one with more than a single tube. (To be continued in our next issue)



# Early American Industries Association

## New Members

We plan to publish each month a list of only those members who have joined since the last list was published. Each fall, after the annual dues have been paid, we expect to send out with the magazine, a mimeographed sheet with a complete list of the membership. This, of course, should be as accurate as possible, so please check your name and address as it has been published in THE CHRONICLE and advise Mr. Goodnow of any corrections. Our new members are as follows:

Dr. Charles C. Adams, Albany, N. Y.  
Miss Mary Allis, New York, N. Y.  
Raymond Anderson, Brooklyn, N. Y.  
Edward D. Andrews, Pittsfield, Mass.  
George S. Armstrong, New York, N. Y.  
Carrington G. Arnold, New York, N. Y.  
F. A. Belden, Boston, Mass.  
Mrs. Robert H. Boyd, Litchfield, Conn.  
Newton C. Brainard, Hartford, Conn.  
Mrs. W. C. Brand, Rumford, R. I.  
Mrs. George C. Bryant, Ansonia, Conn.  
F. Kingsbury Bull, Litchfield, Conn.  
Lowell R. Burch, New York, N. Y.  
Mrs. Roland F. Calhoun, Elizabeth, N. J.  
Arthur G. Camp, Litchfield, Conn.  
Duncan M. Cocke, Williamsburg, Va.  
Mrs. C. L. Couch, Buffalo, N. Y.  
William B. Dall, Brooklyn, N. Y.  
Mrs. Ozias Dodge, Norwichtown, Conn.  
Alexis Doster, Litchfield, Conn.  
Bernard W. Doyle, Leominster, Mass.  
Miss Florence Emnis, Litchfield, Conn.  
Miss Mary G. Eshbaugh, Norwich, Conn.  
Paul H. Fairchild, New York, N. Y.  
T. Hovey Gage, Worcester, Mass.  
William B. Gamble, Briarcliff Manor, N. Y.  
Norman Gehri, Morristown, N. J.  
Mrs. J. H. G. Gilbert, Ware, Mass.  
Dr. Arthur M. Greenwood, Boston, Mass.  
Lurelle V. A. Guild, New York, N. Y.  
Sherman P. Haight, New York, N. Y.  
John T. Harrison, New York, N. Y.  
Miss Elizabeth Haynes, Brooklyn, N. Y.  
Marshall G. Hill, Afton, N. Y.  
Mrs. F. H. House, Buffalo, N. Y.  
Edward Ingraham, Boston, Mass.  
Mrs. Elsie P. Ingraham, Boston, Mass.  
Stanley B. Iverson, Glen Cove, N. Y.  
Albert T. Keller, Bethlehem, Pa.  
Mrs. Isaac Leighton, Manasquan, N. J.  
Mrs. Amos R. Little, Boston, Mass.  
H. D. Lufkin, Bloomfield, N. J.  
Rev. Clair F. Luther, Amherst, Mass.  
Horace M. Mann, Doylestown, Pa.  
Michael A. McGuire, Roseland, N. J.  
John M. Mooney, Albany, N. Y.  
Mrs. Edith Muller, Closter, N. J.  
Mrs. Elie Nadleman, Riverdale, N. Y.  
J. E. Nevil, Cincinnati, O.  
Miss Clara Newton, Sheffield, Mass.  
H. E. Pickersgill, Perth Amboy, N. J.  
Marshall Prentiss, Litchfield, Conn.  
George B. Price, Peabody, Mass.  
Ralph Record, Albany, N. Y.  
Mrs. C. S. Reinhart, New York, N. Y.  
Willis H. Ropes, Salem, Mass.  
Origen S. Seymour, New York, N. Y.  
John T. Snyder, Pelham Manor, N. Y.  
Mrs. Seth Spencer, Litchfield, Conn.  
Mrs. Edward E. Sprague, New York, N. Y.  
Mrs. Florence Adele Storm, Teaneck, N. J.  
Miss Edna V. Trapnell, New York, N. Y.  
Isaac Valentine, Patchogue, N. Y.  
Miss S. Elizabeth York, Mattapoisett, Mass.

## Inventory of a Country Store in Virginia in 1675

As a source of knowledge of what our forefathers—and mothers—wore and used, the inventories and insurance papers of the colonial days offer the most authentic information.

The following list of contents, taken from the inventories of several country stores in York and Lancaster Counties of Virginia from the years 1635 to 1675, gives one an idea of their stock. Some of them will astonish while others will amuse you.

**Clothing:** Suits of adults and youths, bodices and sleeves, bonnets and laces for women, shoes, gloves, hose, cloaks, cravats, handkerchiefs, hats, hoods, Holland night caps, muslin neck cloths, silk fringed gloves, silver shoe buckles, embroidered Holland waistcoats, white gloves, lace caps, lace shirts, lace ruffles, holster caps of scarlet embroidered with silver and gold, gold and silver hat bands, feathered velvet caps.

**Fabrics:** Canvas, linen, blue linen, serge, kersey, Scotch cloth, dowlas, lockram, cotton, ozanburg, flannel in bales, Holland broadcloth, Spanish cloth, white duffel, red cotton, napkin diaper, bed ticking, rugs, worsted for hose for women and children, lace.

**Oddments:** Razors, pins, shears, steel tobacco boxes, pewter salts, candlesticks, tankards, spoons, tin quart pots, lamps, sauce pans, cullenders, pepper boxes, lanterns, wooden bellows, sifters, sieves, ladles, brooms, chaffing dishes, frying pans, saddles, soap, ten penny nails, six penny nails, double penny nails, shot, fish hooks, fish lines, guns, powder, fish hooks for sheephead (a much sought fish), brass mortars, scissors, pots, kettles, curry-combs, sheep shears, plow-chains, brass scales, reap-hooks, shares and colters for plows, tape gimp, thread-buttons, blankets, curtains, valances, smoothing irons, tools, hammers, hatchets, chisels, augers, sickles, froes, hand pit and hand saws, axes, files, shovels, hoes, compasses. Also locks, staples, bellows, flesh-forks, gridiron, tongs, spades, pincers, gimlets, pickaxes, grindstones, plows, mattocks, nets, wooden platters, dishes, porringers, iron pots, iron posts, tables, physic, wool-cards, funnels, needles, brandy, wine, aqua vitae, and pretty much every article for which Virginians had any use.

Gun-flint making was a very special trade, which required a special set of tools,—a square iron hammer for breaking up the large lumps, a pointed hammer for scaling off the white coating, and chipping off pieces of approximate size, a double-ended chisel, one end of which was driven into a wooden block, and the flint held against the other end and struck with a third hammer, with a disc head, to shape it. A photograph in a London periodical within the past year or two showed an oldtimer, in one of the rural districts, still working at this trade, although he admitted that he had had no call for his product for many years.

## Museum Notes

Mr. U. Waldo Cutler, Curator of the Worcester (Mass.) Historical Society contributes the following:

"Tools are a primary expression of ingenuity in meeting human conditions. The lower animals do not make themselves tools nor find them in nature already made. To trace out the number and the complexity of tools from the time of the primitive Red-men and all down the centuries of White occupation is a fascinating study. The industrial revolution led rapidly to the introduction of more and more complex machines, for the production of which tools were themselves the means. These secondary devices for making a personal living while developing a worthy community life multiplied to a vast extent the length of an arm, the power of a blow, the delicacy of a process. To follow the wonderful story of the development of industry through the study of the implements, tools, machines used in all our manifold activities is vastly complex, but vastly interesting and instructive. To help in this recreative but tremendously effective department of education is one of the purposes of the Worcester Historical Society as it collects and organizes and throws open freely to the public its crowded building at Armory Square."

A leaflet sent us by the Museum of Science and Industry of Chicago, reads as follows:

### *An Institution to Reveal the Technical Ascent of Man*

The Museum of Science and Industry is situated on Lake Michigan at 57th Street. Its collections will trace the technical progress of man from primitive times to the present day. Eleven miles of exhibits will tell in three dimensional form the story of man's use of tools and machines from the stone hatchet to the complicated machines of today. The demonstrators at the museum are experts in their particular fields and conduct interesting and lively tours of exhibits at frequent intervals.

The vast interior of this building, designed to accommodate the planned exhibits, will not be completed until 1935. However, a large area has been prepared to welcome the visitor and to present exhibits through which entertainment, education and inspiration provide a new avenue of recreation and study.

The section now open to the public contains enough exhibits to give the visitor a cross-sectioned view of what the finished museum will be like. Chief among these exhibits is a full-sized operating bituminous coal mine of three thousand tons a day capacity. In addition to the coal mine with its underground workings and huge operating machines, there are many other exhibits relating to the geology, production, economies and utilization of coal.

At the conclusion of A Century of Progress many of the important World's Fair exhibits will be placed in the museum and at that time the other sequences will be opened. These will consist of exhibits on the Fundamental Sciences of Physics and Chemistry and on Geology, Mining, Agriculture, Forestry, Power, Transportation, Architecture and City Development, Printing and Communication.

We would like to have similar descriptions from other museums.

## ADVERTISEMENTS

Our first advertisements appear on this page. We are certain that, in practically every case, the advertiser, in paying for the space, was inspired principally by a desire to do his duty by the magazine, rather than by any hope of very substantial results. We ask the members to tell us frankly whether they favor continuing to give over

this large amount of space to advertisements. At our present rates (50 cents an inch), the profit is very small, and we shall accept advertisements for the next issue at the same rates only tentatively, until we have heard from the members. In any case, when the advertiser's name is not given, address the Editor.

WANTED — Antique fishing tackle, rods, reels, hand-forged hooks, horse-hair lines, flies, etc., also American railroad time-tables, issued before 1870. Please give full description and quote lowest price. John T. Snyder, 100 Broadway, New York.

THE AMERICAN ANTIQUARIAN SOCIETY, Worcester, Mass., has an extra copy of J. and R. Bronson's Domestic Manufacturer's Assistant in the Arts of Weaving and Dyeing, Utica 1817, for sale at \$5.00. Will send it on approval.

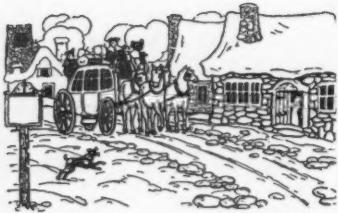
WANTED — Articles or other information about the early Southern plantation industries, also books or other data on the hand manufacture of barrels and tubs.

### NORMAN GEHRI ANTIQUES

MORRISTOWN, NEW JERSEY

WANTED — Nail-heading tools and machines and especially any tools used to cut nails from iron strips.

WANTED — The following blacksmith's tools: a swage block having a depression for making spoons; a cone or mandrel of wood with iron bars on its side; old leather apron; horse-tail fly brush.



THE LATCH STRINGS  
HANG OUT

on

*Wiggins Old Tavern*

and

*The Old Country Store*

at

HOTEL NORTHAMPTON

Northampton, Mass.

"An Inn of Colonial Charm"

ANTIQUES { To Live Among  
                  { To Eat Among  
                  { To Buy

LEWIS N. WIGGINS, Landlord

WANTED — Unusual trade tools, and books of trades and industrial encyclopedias issued before 1860. Printed circular on request. W. B. Sprague, 43 Cedar Street, New York City.

### Colonial Lighting

The story of the development of lighting from Pilgrim days to the advent of kerosene, with illustrations of more than 400 lamps, lanterns, candle and rushlight holders, candle moulds, etc.

The only book entirely devoted to this subject. Published by Little, Brown and Company, Boston.

Upon receipt of the regular price (\$7.50) the author, Arthur H. Hayward, will *autograph* and promptly mail a copy. Address him at 324 Washington Street, Boston, Mass.

NEAR YORKTOWN AND WILLIAMSBURG — An old Virginia home with modern plumbing and hot water heating; each bedroom with private bath and an open fireplace. Our own oyster shore of eight acres, lawn of five acres, in a plantation of over 250 acres, most of them in narcissus and other bulbs. A wonderful sight in early April. Brick house, cool in summer. Brick garage. A very comfortable place to stay. Prices, \$4.00 per day, \$25 per week, or \$20 if staying over four weeks. Tested herd on the place. References exchanged.

MRS. C. A. WATROUS

Gloucester, Virginia.

### TO ALL SEARCHERS FOR THE OLD:

We constantly have on hand and offer the collector an assortment of early tools, utensils, machines, etc.; books too can be supplied on a variety of industries, some giving the intimate details of the uses of tools as well as that of manufacturing.

We would appreciate hearing from all collectors who desire to have their names on our mailing list and to receive quotations on such items as single tools, or implements, or on a complete manufacturing unit for the making of hair and wire sieves including the old hand made looms for weaving the hair, or wire; the trimmers, cutters, crimpers, benders, molds, etc.; or on a collection of early wind musical instruments; or old pine chests with oak hinges of unique construction in which Jacob Hooper, the first son of William Hooper the 3rd, signer of the Declaration of Independence, stored the family grain.

We have many other items of an interesting character including at all times antiques, glass, silver, etc.

THE VILLAGE STUDIO

Old Paper Mill Village  
West Cummington, Mass.



